[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-0467; Directorate Identifier 2016-NM-008-AD; Amendment 39-18395; AD 2016-04-01]

RIN 2120-AA64

Airworthiness Directives; Airbus Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule; request for comments.

SUMMARY: We are superseding Airworthiness Directive (AD) 2015-26-02 for all Airbus Model A330-200, A330-200 Freighter, and A330-300 series airplanes; and Airbus Model A340-200, A340-300, A340-500, and A340-600 series airplanes. AD 2015-26-02 required, for certain airplanes, identification of the part number, serial number, and standard of the ram air turbine (RAT) pump, RAT module, RAT actuator, and RAT lower gearbox assembly; replacement of the balance weight screw, modification of the actuator coil spring, modification of the actuator, an inspection of the anti-stall valve for correct installation in the RAT pump housing; and corrective actions if necessary. For certain other airplanes, AD 2015-26-02 required re-identification or replacement of the RAT module. This new AD requires the same actions as AD 2015-26-02. This new AD was prompted by a report of a typographical error in the regulatory text of AD 2015-26-02. We are issuing this AD to prevent loss of the impeller function and RAT

pump pressurization capability, which, if preceded by a total engine flame-out, could result in loss of control of the airplane.

DATES: This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of February 2, 2016 (80 FR 81174, December 29, 2015).

We must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For Airbus service information identified in this final rule, contact Airbus SAS, Airworthiness Office – EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email airworthiness.A330 A340@airbus.com; Internet http://www.airbus.com.

For Hamilton Sundstrand service information identified in this final rule, contact Hamilton Sundstrand, Technical Publications, Mail Stop 302-9, 4747 Harrison Avenue, P.O. Box 7002, Rockford, IL 61125-7002; telephone 860-654-3575; fax 860-998-4564; email tech.solutions@hs.utc.com; Internet http://www.hamiltonsundstrand.com.

You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-0467.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-0467; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA,

1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1138; fax 425-227-1149.

SUPPLEMENTARY INFORMATION:

Discussion

On December 9, 2015, we issued AD 2015-26-02, Amendment 39-18350 (80 FR 81174, December 29, 2015) ("AD 2015-26-02"). AD 2015-26-02 applied to all Airbus Model A330-200, A330-200 Freighter, and A330-300 series airplanes; and Airbus Model A340-200, A340-300, A340-500, and A340-600 series airplanes. AD 2015-26-02 was prompted by a report indicating that, during a production flight test, the RAT did not pressurize the green hydraulic system. AD 2015-26-02 required for certain airplanes, identification of the part number, serial number, and standard of the RAT pump, RAT module, RAT actuator, and RAT lower gearbox assembly; replacement of the balance weight screw, modification of the actuator coil spring, modification of the actuator, an inspection of the anti-stall valve for correct installation in the RAT pump housing; and corrective actions if necessary. For certain other airplanes, AD 2015-26-02 required re-identification or replacement of the RAT module. We issued AD 2015-26-02 to prevent loss of the impeller function and RAT pump pressurization capability, which, if preceded by a total engine flame-out, could result in loss of control of the airplane.

Since we issued AD 2015-26-02, we received a report of a typographical error in the regulatory text of AD 2015-26-02. Paragraph (m) of AD 2015-26-02 inadvertently referred to paragraph (n) and should have referred to paragraph (o), "Parts Installation Prohibition."

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2013-0274, dated November 15, 2013 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for all Airbus Model A330-200, A330-200 Freighter, and A330-300 series airplanes; and Airbus Model A340-200, A340-300, A340-500, and A340-600 series airplanes. The MCAI states:

> During a production flight test of an A330-300 aeroplane, the Ram Air Turbine (RAT) did not pressurize the green hydraulic system. Investigation revealed that the impeller drive (hex) shaft had a reduced length of engagement with the pump drive shaft. This caused the impeller drive shaft to disengage from the pump and disconnect the impeller. It was determined that the disconnection was the result of internal hex dimensions on the pump impeller shaft, which had been changed in a manufacturing drawing. From the investigation analysis, it was possible to identify a list of affected parts.
>
> This condition, if not detected and corrected, could lead to the loss of impeller function and RAT pump pressurization capability, possibly resulting, in case of total engine flame out, to the loss of control of the aeroplane.
>
> To address this unsafe condition, a new design RAT pump shaft has been developed with a decreased hexagonal shaft housing depth, which increases the hexagonal drive shaft engagement in the impeller shaft to carry the impeller torque. Airbus issued Service Bulletin (SB) A330-29-3122, SB A340-29-4093 and SB A340-29-5021 to provide instructions for in-service replacement of the affected RAT hydraulic pumps, or re-identification of the RAT pump and complete RAT module, as applicable.
>
> For the reasons described above, this [EASA] AD requires identification and replacement [modification] or re-identification of all affected RAT hydraulic pumps on

A330 and A340-200/300 aeroplanes, and replacement [modification] of all affected RAT modules on A340-500/-600 aeroplanes.

For affected pumps, the required actions also include concurrent actions, as applicable, including replacement of the balance weight screw, modification of the actuator coil spring, modification of the actuator, an inspection of the anti-stall valve for correct installation in the RAT pump housing and re-installation if necessary. For affected pumps, corrective actions include replacement of the RAT hydraulic pump, and re-identification of the part number of the RAT module. You may examine the MCAI on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-0467.

Related Service Information under 1 CFR part 51

Airbus has issued the following service information:

• Airbus Service Bulletin A330-29-3122, dated October 25, 2012.

• Airbus Service Bulletin A340-29-4093, dated October 25, 2012.

This service information describes procedures for identifying the part number, serial number, and standard of the RAT pump, RAT module, RAT actuator, and RAT lower gearbox assembly; replacing the balance weight screw, modifying the actuator coil spring, modifying the actuator, and doing an inspection of the anti-stall valve for correct installation; and re-identifying the part numbers of the RAT hydraulic pump and RAT module.

Airbus also issued Service Bulletin A330-29-3126, dated June 12, 2014; and Service Bulletin A340-29-4097, dated June 12, 2014, which describe procedures for

identifying the part number and serial number of the RAT actuator; modifying the RAT actuators; and re-identifying the part numbers of the RAT module.

In addition, Airbus issued Service Bulletin A340-29-5021, dated October 2, 2012; and Service Bulletin A340-29-5025, dated June 16, 2014, which describe procedures for replacing (modifying) the RAT module.

Hamilton Sundstrand has issued Service Bulletin ERPS06M-29-19, dated August 6, 2012, which identifies the serial numbers of the suspect hydraulic pump.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

FAA's Determination and Requirements of this AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are issuing this AD because we evaluated all pertinent information and determined the unsafe condition exists and is likely to exist or develop on other products of these same type designs.

FAA's Determination of the Effective Date

We are superseding AD 2015-26-02 to correct a typographical error in the regulatory text. No other changes have been made to AD 2015-26-02. Therefore, we determined that notice and opportunity for prior public comment are unnecessary.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and opportunity for public comment. We invite you to send any written relevant data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2016-0467; Directorate Identifier 2016-NM-008-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD because of those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this AD.

Costs of Compliance

We estimate that this AD affects 66 airplanes of U.S. registry.

We also estimate that it will take about 14 work-hours per product to comply with the basic requirements of this AD. The average labor rate is $85 per work-hour. Based on these figures, we estimate the cost of this AD on U.S. operators to be $78,540, or $1,190 per product.

In addition, we estimate that any necessary follow-on actions will take about 18 work-hours and require parts costing up to $427,301, for a cost of $428,831 per product. We have no way of determining the number of aircraft that might need this action.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a "significant regulatory action" under Executive Order 12866;

2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);

3. Will not affect intrastate aviation in Alaska; and

4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing airworthiness directive (AD) 2015-26-02, Amendment 39-18350 (80 FR 81174, December 29, 2015), and adding the following new AD:

2016-04-01 Airbus: Amendment 39-18395; Docket No. FAA-2016-0467; Directorate Identifier 2016-NM-008-AD.

(a) Effective Date

This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

(1) This AD replaces AD 2015-26-02, Amendment 39-18350 (80 FR 81174, December 29, 2015).

(2) This AD affects AD 2012-21-19, Amendment 39-17235 (77 FR 65812, October 31, 2012); and AD 2012-21-20, Amendment 39-17236 (77 FR 65799, October 31, 2012).

(c) Applicability

This AD applies to all Airbus airplanes, certificated in any category, identified in paragraphs (c)(1) and (c)(2) of this AD, all manufacturer serial numbers.

(1) Model A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes.

(2) Model A340-211, -212, -213, -311, -312, -313, -541, and -642 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 29, Hydraulic Power.

(e) Reason

This AD was prompted by a report indicating that, during a production flight test, the ram air turbine (RAT) did not pressurize the green hydraulic system. We are issuing this AD to prevent loss of the impeller function and RAT pump pressurization capability, which, if preceded by a total engine flame-out, could result in loss of control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Identification of RAT Components

For Airbus Model A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes; and Model A340-211, -212, -213,

-311, -312, and -313 airplanes: Except as provided by paragraph (i) of this AD, within 36 months after the effective date of this AD, identify the part number, serial number, and standard (through the mod-dots) of the RAT pump, RAT module, RAT actuator, and RAT lower gearbox assembly, in accordance with the Accomplishment Instructions of the applicable Airbus service information specified in paragraphs (g)(1) and (g)(2) of this AD. A review of airplane maintenance records is acceptable in lieu of this identification if the part number, serial number, and standard can be conclusively determined from that review.

(1) For Airbus Model A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes: Airbus Service Bulletin A330-29-3122, dated October 25, 2012.

(2) For Airbus Model A340-211, -212, -213, -311, -312, and -313 airplanes: Airbus Service Bulletin A340-29-4093, dated October 25, 2012.

(h) Corrective and Concurrent Actions

If the serial number of the RAT hydraulic pump is included in table 7, "Suspect Hydraulic Pump Serial Numbers," of Hamilton Sundstrand Service Bulletin ERPS06M-29-19, dated August 6, 2012: Within 36 months after the effective date of this AD, do all applicable corrective actions, in accordance with the Accomplishment Instructions of the applicable Airbus service information specified in paragraphs (g)(1) and (g)(2) of this AD. Prior to or concurrently with doing the corrective actions required by this paragraph, do the actions specified in paragraphs (h)(1) through (h)(4) of this AD, in accordance with the Accomplishment Instructions of Airbus Service Bulletin

A330-29-3122, dated October 25, 2012 (for Model A330-200, -200 Freighter, and -300 series airplanes); or Airbus Service Bulletin A340-29-4093, dated October 25, 2012 (for Airbus Model A340 -211, -212, -213, -311, -312, and -313 airplanes).

(1) Replace the balance weight screw.

(2) Modify the actuator coil spring.

(3) Modify the actuator.

(4) Do a general visual inspection of the anti-stall valve for correct installation in the RAT pump housing, and if any incorrect installation is found, before further flight, correctly install the anti-stall valve.

(i) Exception to Service Information Specifications

Airbus Service Bulletin A330-29-3122, dated October 25, 2012 (for Model A330-200, -200 Freighter, and -300 series airplanes), refers to Hamilton Sundstrand Service Bulletin "EPRPS06M-29-13" as an additional source of guidance for doing certain actions required by paragraph (h) of this AD. The first "P" in the citation should have been omitted; the correct reference is to Hamilton Sundstrand Service Bulletin "ERPS06M-29-13."

(j) Re-identification of Part Numbers

If the serial number of the RAT hydraulic pump is not included in table 7, "Suspect Hydraulic Pump Serial Numbers," of Hamilton Sundstrand Service Bulletin ERPS06M-29-19, dated August 6, 2012: Within 36 months after the effective date of this AD, re-identify the part numbers of the RAT hydraulic pump and RAT module, in accordance with the Accomplishment Instructions of the applicable Airbus service

information specified in paragraphs (g)(1) and (g)(2) of this AD.

(k) Service Information for Optional Actions

Accomplishment of the actions required by paragraphs (g), (h), and (j) of this AD, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-29-3126, dated June 12, 2014; or Airbus Service Bulletin A340-29-4097, dated June 12, 2014, as applicable, constitutes compliance with the requirements of paragraphs (g), (h), and (j) of this AD.

(l) RAT Module Replacement (Modification)

For Airbus Model A340-541 and -642 airplanes having RAT module part number (P/N) 772722D, 772722E, 772722F, or 772722G: Within 36 months after the effective date of this AD, replace (modify) the RAT module, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A340-29-5021, dated October 2, 2012. As an option, accomplishment of the RAT module replacement (modification), in accordance with the Accomplishment Instructions of Airbus Service Bulletin A340-29-5025, dated June 16, 2014, constitutes compliance with the requirement of this paragraph.

(m) Exception to Paragraphs (g), (h), and (j) of this AD

The actions required by paragraphs (g), (h), and (j) of this AD are not required for airplanes on which Airbus Modification 202537 was embodied in production, provided it can be determined that, since the airplane's first flight, no RAT hydraulic pump or RAT module having a part number identified in paragraph (o) of this AD is installed on that airplane.

(n) Terminating Action for Certain Requirements of Other ADs

(1) For Airbus Model A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes; and Model A340-211, -212, -213, -311, -312, and -313 airplanes: Accomplishment of the actions required by paragraphs (g), (h), and (j) of this AD constitutes compliance with the requirements of paragraphs (g)(1) and (g)(2) of AD 2012-21-19, Amendment 39-17235 (77 FR 65812, October 31, 2012); and paragraphs (g)(1) and (g)(2) of AD 2012-21-20, Amendment 39-17236 (77 FR 65799, October 31, 2012).

(2) For Airbus Model A340-541 and -642 airplanes: Accomplishment of the actions required by paragraph (l) of this AD constitutes compliance with the requirements of paragraphs (h)(1) and (h)(2) of AD 2012-21-20, Amendment 39-17236 (77 FR 65799, October 31, 2012).

(o) Parts Installation Prohibition

(1) For Airbus Model A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes; and A340-211, -212, -213, -311, -312, and -313 airplanes: After modification of the RAT module as required by paragraph (h) of this AD, no person may install any complete RAT module having a part number identified in paragraph (o)(1)(i) of this AD, or any RAT hydraulic pump having the part number identified in paragraph (o)(1)(ii) of this AD, on any airplane.

(i) RAT module P/N 766351, 768084, 770379, 770952, 770952A, 770952B, 1702934, 1702934A, or 1702934B.

(ii) RAT hydraulic pump P/N 5909522 (Parker P/N 4207902).

(2) For Airbus Model A340-541 and -642 airplanes: After modification of the RAT module as required by paragraph (l) of this AD, no person may install any complete RAT module having P/N 772722D, 772722E, 772722F, or 772722G, on any airplane.

(p) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1138; fax 425-227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must

include the DOA-authorized signature.

(q) Related Information

Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2013-0274, dated November 15, 2013, for related information. This MCAI may be found in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-0467.

(r) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(3) The following service information was approved for IBR on February 2, 2016 (80 FR 81174, December 29, 2015).

(i) Airbus Service Bulletin A330-29-3122, dated October 25, 2012.

(ii) Airbus Service Bulletin A330-29-3126, dated June 12, 2014.

(iii) Airbus Service Bulletin A340-29-4093, dated October 25, 2012.

(iv) Airbus Service Bulletin A340-29-4097, dated June 12, 2014.

(v) Airbus Service Bulletin A340-29-5021, dated October 2, 2012.

(vi) Airbus Service Bulletin A340-29-5025, dated June 16, 2014.

(vii) Hamilton Sundstrand Service Bulletin ERPS06M-29-19, dated August 6, 2012.

(4) For Airbus service information identified in this AD, contact Airbus SAS, Airworthiness Office – EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email airworthiness.A330 A340@airbus.com; Internet http://www.airbus.com.

(5) For Hamilton Sundstrand service information identified in this AD, contact Hamilton Sundstrand, Technical Publications, Mail Stop 302-9, 4747 Harrison Avenue, P.O. Box 7002, Rockford, IL 61125-7002; telephone 860-654-3575; fax 860-998-4564; email tech.solutions@hs.utc.com; Internet http://www.hamiltonsundstrand.com.

(6) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(7) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on February 8, 2016.

Michael Kaszycki,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

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